

FOR THE LONG HAUL: Public-Private Partnerships for Long-Term Disaster Recovery

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The Southeast Disaster Recovery Partnership (SDRP) aims to provide the training, resources, information, and industry support the coastal communities need to effectively recover from disaster events.



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EXECUTIVE SUMMARY

The purpose of this report is to understand public-private partnerships (P3s, PPPs) as they relate to long-term disaster recovery. This is achieved through the exploration of case studies that describe the organizational structures, funding models, and lessons learned. Recommendations found in this report are based on case investigation, primarily aimed at public-sector officials and existing partnerships attempting to address common challenges faced across organizations and geographies.

This investigation focuses on long-term recovery, as opposed to mitigation, preparedness, or response.¹ Long-term recovery is distinguished by its duration, involving processes taking place months or years following an event. One of the primary constraints in recovery decision-making involves addressing the tension between speed and deliberation (Olshansky, 2006). ‘Building back quickly’ may involve the active engagement of fewer stakeholders because of the increased time it takes to deliberate and gather input. In contrast, increased deliberation and inclusion of multiple stakeholders can mean those involved in projects mindfully address the range of needs which can lead to a more protracted process. The challenge is to strike the appropriate balance spanning multiple stakeholders, including those in both the public and private sectors. . Robust public-private partnerships offer an arrangement to address deliberation needs by quickly involving multiple stakeholders that have organized in-advance of a disaster.

Public-private partnerships formed post-disaster often involve the short-term, publicity-oriented donation of resources as widely cited in the literature (Berg, A. 2016, Busch 2013, Quero 2012). Less is known about how PPP’s address long-term recovery issues and associated challenges, which requires a different level of commitment from public and private entities. The examination of PPPs engaged in long-term recovery efforts shows there are distinct incentives, challenges, and outcomes.

There are instances of the private sector aiding community recovery without direction from government agencies, as in the example of big box retailers with “command centers,” tracking

¹ <http://restoreyoureconomy.org/disaster-overview/phases-of-disaster/>

hurricanes and other hazard events as a state emergency operation center (EOC) would. This type of careful planning leads to a deployment of resources to store locations leading to an expedited recovery process. Only since 2010 have FEMA and state entities officially begun to let business representatives observe their joint-field office and EOC activities². This is but one example of businesses working independently towards recovery-oriented goals. The implication here, that many businesses participate in recovery processes that go un/underreported, is important when considering the potential linkages that could be made through public-private partnership. It also highlights potential lessons that could be shared with others involved in recovery in order to improve the process.

The World Bank defines public-private partnerships as an arrangement where entities “combine the skills and resources of both the public and private sectors through sharing of risks and responsibilities... [enabling] governments to benefit from the expertise of the private sector, and [allowing] them to focus instead on policy, planning, and regulation by delegating day-to-day operations.”³

This report attempts to fill the gap in the understanding of partnerships by examining cases across each Recovery Support Function (RSF) category as defined by the U.S. Federal Emergency Management Agency’s (FEMA) National Disaster Recovery Framework (NDRF)⁴. The NDRF, initially released in 2011, serves as a “guide to promote effective recovery,” through outlining core principles, roles and responsibilities of coordinators and stakeholders, offering a coordinating structure for “pre- and post-disaster recovery planning.”⁵

RSFs include:

- Economic Recovery
- Infrastructure Systems
- Health & Social Services
- Housing

² <http://www.govtech.com/policy-management/Big-Box-Retailers-Teach-Disaster-Recovery.html>

³ <https://ppp.worldbank.org/public-private-partnership/node/335/>

⁴ <https://www.fema.gov/recovery-support-functions>

⁵ <https://www.fema.gov/pdf/recoveryframework/ndrf.pdf>

- Natural & Cultural Resources
- Community Planning & Capacity Building

Through accessing external resources as well as drawing from internal recommendations, SDRP aims to learn from case examples and disseminate potential public-private partnership best practices. Candidate cases were aligned with FEMA Recovery Support Functions and selected based on depth of information available, as well as knowledge yielded through phone and in-person interviews. All interviews with partnership representatives have been de-identified unless otherwise noted.

LITERATURE REVIEW

Long-term disaster recovery features a different set of challenges from short-term recovery, or response. Actors engaged in recovery-oriented decision-making at this scale have influence over the conditions of recovery for months, years, and even decades following the disaster event (Olshansky, R., & Chang, S., 2009). Disaster recovery has been defined as:

“The differential process of restoring, rebuilding, and reshaping the physical, social, economic, and natural environment through pre-event planning and post-event actions that enhance the resilience and adaptive capacity of assistance networks to effectively address recovery needs that span rapid and slow onset hazards and disasters (Smith, Martin, Wenger, 2017).”

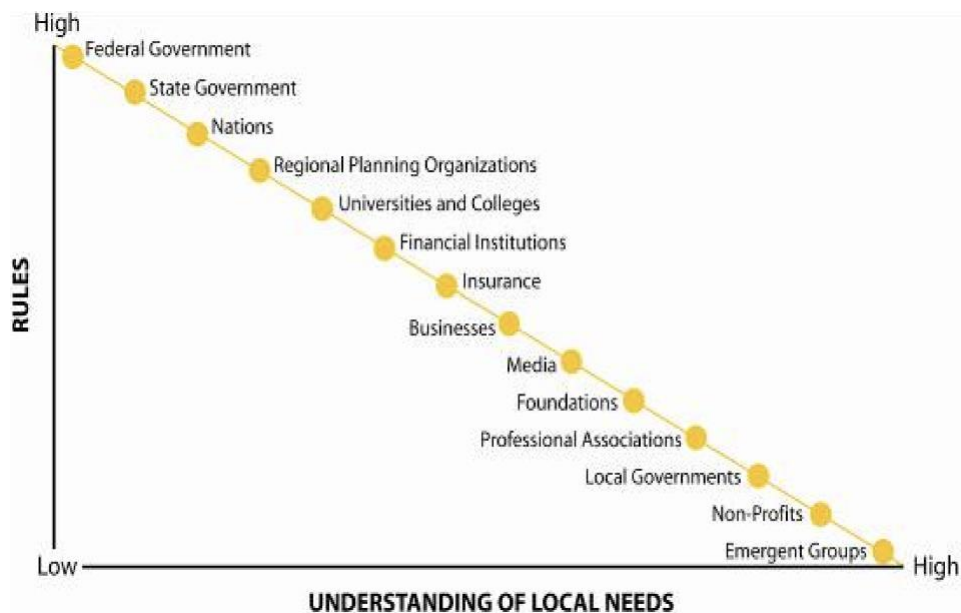
In these contexts, public and private agents have a multitude of reasons to collaborate, including opportunities to influence decisions, faster receipt of pertinent information to make informed decisions, and opportunities to craft agreements that better meet stakeholder/customer needs, among many others (Chen, 2013). Private sector partners often recognize that stronger public-private relationships “positively influence the capability of participating supply chain operators to manage disaster consequences that impact their ability to provide value to relevant stakeholders located within and outside the impact area.” (Stewart, Kolluru, Smith, 2009). Public-private partnerships are essentially part of the “assistance networks” Smith, Martin, and Wenger refer to, dedicated to “address[ing] recovery needs (2017).” These arrangements can come about from a recognition of heavily-overlapping interests between a public agency and private entity. Recovery literature tends to hone in on the planning and implementation processes of government and NGOs, without exploring the role of the private sector, despite businesses and economic recovery being central goals in most governments’ disaster recovery agendas (Smith, 2011).

The ability to communicate needs and interests (disseminate information) is crucial – without this exchange, a community’s recovery may be more prone to the duplication of efforts and a failure to address unmet needs. In many cases, the recovery needs as well as efforts undertaken

by many businesses go unreported (Swanson, R., Smith, R., 2013). When communication facilitates inter-sectoral partnership, recovery outcomes tend to feature a sharing of resources (technical, financial), reduced stakeholder conflict, mutual trust and understanding, the potential for regional cohesion, and an overall improved disaster resilience (Chen, 2013). The importance of information dissemination aids recovery networks in integrating vertically, by communicating needs from the ground to higher-level decision makers, as well as horizontally, by allowing agencies to work in concert rather than duplicating efforts (Smith, 2011).

Existing literature organizes different institutions as they relate to number of rules and regulation for use of resources versus the entity's understanding on local needs (Fig 1.1, Smith, 2011). Entities that are typically involved in public-private partnerships occupy the center part of the diagonal line (Universities and Colleges, Financial Institutions, Businesses, Insurance, Professional Associations, etc.). This segment of the line is termed the “zone of uncertainty,” referring to actors that play crucial roles in recovery, but are often not included in formal planning processes (Smith, 2011). This positionality is important, as they can operate under fewer rules than government entities ‘above,’ possibly leading to a quicker speed of assistance. Entities in this zone could also provide a great amount of resources to the entities ‘below,’ who are more cognizant of recovery gaps. Entities in the zone of uncertainty, when engaged in a public-private partnership setting, could potentially bridge the needs, resources, and capabilities of all entities along the full length of the line. These connections need to be understood through further investigation.

Fig. 1.1 Disaster recovery assistance network



There are currently a lack of investigations categorizing long-term disaster recovery public-private partnerships in the United States, with most case studies featuring organizations based in Asia and Oceania (APEC, 2013). The literature indicates that partnerships for long-term disaster recovery can take the form of two broad categories: Agreements for physical reconstruction and partnerships for learning/information sharing (Chen, 2013). This typology is utilized in each case study presented in this investigation, with each type defined as follows:

Reconstruction Partnerships (Type 1)

Reconstruction partnerships often emerge as engineering and construction companies offer expertise tied to projects following disaster. These arrangements, which may start as a pro bono, ad hoc relationship, tend to become more formal when reconstruction project timelines become solidified and prioritized. Committees and task forces may convene on a volunteer-basis for private sector partners, preceding bidding and contracting. Consulting expenses are often covered through internal fundraising and cited as part of larger corporate social responsibility mission. Sometimes Type 1 partnerships engage in construction to improve hazard resilience, rather than merely reconstructing damaged sites (Chen, 2013).

Examples of Type 1 partnerships include:

The Critical Infrastructure Resiliency Task Force (CIRTF), a partnership formed in Chicago devoted to “fast-track solutions to common issues” in “infrastructure and interconnected systems.” This is accomplished through the formation of a working group of public officials and private firms.⁶

⁶ https://www.fema.gov/pdf/privatesector/cirtf_chicago.pdf

In a variety of post-disaster contexts, companies such as Home Depot and Lowes engage local governments and nonprofits to bring supplies to municipalities recovering from events. These arrangements began following Hurricane Andrew in 1992.⁷

“CH2M Hill provided professional support to large-scale international relief agencies (such as USAID). It also set up water treatment plants in Banda Aceh, Indonesia, and Potuvil, Sri Lanka, the former in partnership with GE (internally raising \$80,000 to cover consulting costs)” (Chen, 2013).

Partnerships for learning/information sharing (Type 2)

Partnerships for learning and information sharing facilitate the communication of needs between businesses and government agencies. Type 2 partnerships communicate the capacity of the private sector to aid public sector project goals. Usually these entities have missions devoted to economic, organizational, institutional, social, or policy-oriented learning, often leading to joint-decision making regarding recovery policy and programs. Many partnerships emerge as “learning laboratories” to identify best practices or gaps in recovery to address before the next disaster (Chen, 2013).

Type 2 partnerships often require fewer funding commitments, compared to Type 1.

Many partnerships operate as streamlined, practiced channels of communication between groups, such as the Australian Trusted Information Sharing Network (TISN) for Critical Infrastructure Resilience (CIR). This partnership devotes its resources to the facilitation of information-sharing for long-term policymaking regarding national infrastructure.

Other Type 2 partnerships are featured in this report.

⁷ <https://corporate.homedepot.com/community/disaster-relief>



Cases in Public Private Partnerships for Disaster Recovery

This report features an examination of the following partnerships: 1) Safeguard Iowa Partnership (economic development), 2) P2R2, (infrastructure), 3) SAFER Santa Rosa (health and social service), 4) Hancock Resource Center (housing) , and 5) the New Jersey Corporate Wetlands Restoration Project (environment).A callout box is dedicated to the Hurricane Matthew Disaster Recovery and Resilience Initiative, an organization aimed to tackle challenges relating to community planning and capacity building.

METHODS

Cases were identified through extensive web-search, investigation of FEMA’s public-private partnership case collection, as well as the consultation of state partners in the Southeast Disaster Recovery Partnership (SDRP)⁸. FEMA’s partnership resource features a selection of cases that operate at the event-specific, local, state, national, and international levels of decision-making. SDRP is an organization devoted to increasing regional resilience, knowledge, and resource-sharing for projects related to disaster recovery. SDRP is made up of state, county, advisory, and private-sector partners across North Carolina, South Carolina, Georgia, and Florida⁹.

Each of the cases were comparatively analyzed across the following elements:

- Origin
- Mission & Goals
- Partnership Type
- Programs & Operation
- Structure
- Funding

⁸ <https://www.fema.gov/public-private-partnership-models>

⁹ <http://secoora.org/sdrp/>

- Challenges

Representatives from five of the six investigated organizations agreed to semi-structured interviews designed to elicit details about the entity's origin, organizational structure, success, and obstacles. Interview length ranged from 30 – 60 minutes. The goal of each interview was to uncover structural barriers and aids to self-defined success. Each partnership case was compared with the typology established in the literature before thematic patterns in success/hindrances were identified. A write-up of themes tied to specific recommendations is provided at the end of the report with, interview instrument located in the appendix.

CASE STUDIES

Economic Recovery

FEMA defines “economic recovery [as] the ability to return economic and business activities (including agricultural) to a state of health and develop new economic opportunities that result in a sustainable and economically viable community.”¹⁰

The Safeguard Iowa Partnership (SIP) has been instrumental in economic and business recovery in the upper Midwest since 2007. This organization is described as “a voluntary coalition of the state’s business and government leaders who share a commitment to strengthen the capacity of the state to prevent, prepare for, respond to, and recover from disasters through public private collaboration,”¹¹.



Major flooding across the Midwest in 2007 prompted Iowa Governor Culver to ask state emergency management officials and infrastructure planners about how governments can “communicate with the private sector in the event of a disaster.”¹² This led state officials to approach the Iowa Business Council, a nonprofit organization focused on statewide economic growth and technological advancement.¹³ After several meetings, the Safeguard Iowa Partnership was established.

Partnership representatives developed goals rooted in the idea that “the government cannot and should not be the only responders in a disaster situation,” recognizing that “the private sector has a wealth of knowledge and assets that may be needed during an emergency.”¹⁴

¹⁰ [https://www.fema.gov/media-library-data/1489754721419-8d29c58733990d27f2e8894f33cdbdb2/RSF_Economic_0616_508\(1\).pdf](https://www.fema.gov/media-library-data/1489754721419-8d29c58733990d27f2e8894f33cdbdb2/RSF_Economic_0616_508(1).pdf)

¹¹ <http://www.safeguardiowa.org/who-we-are>

¹² Interview; SIP Representative 8.31.17.

¹³ http://www.iowabusinesscouncil.org/en/about_us/

¹⁴ <http://www.safeguardiowa.org/who-we-are>

SIP is Type 2, or a “partnership for learning and information-sharing.”¹⁵ The partnership has been an active participant in 11 Emergency Operations Center activation events, responding to eight requests for mobilized financial and informational resources from the private sector.

Additionally, SIP serves as an information hub for businesses following a disaster event. SIP’s “Back to Business” workshops, which typically follow major flood events, help businesses learn about financing recovery in both the short and long-term. A total of 18 business trainings and workshops have been conducted, with a total of 782 attendees since 2007.

As of 2016, the partner roster boasts several hundred entities spanning four categories: 150 private sector companies, 129 public sector agencies, 52 nonprofit organizations, and 31 associations.¹⁶ Private sector partners include universities, small business, large banks, insurance companies, and others. Neighborhood, municipal, and county government agencies are also represented, ranging from police departments to post offices. Nonprofits include faith-based organizations, health & social service providers, as well as professional unions and associations.¹⁷ SIP attracts membership by presenting a channel of communication for clear, direct information from state officials following disaster, as well as membership of a network of leaders with access to workshop events.

With two full-time staff, led by a board of 11 people from private and public entities, SIP maintains a \$238,000 annual budget (54% grants, 46% sponsor donations), with annual operating expenditures totaling \$220,000 (58% programs, 42% management). Grants come from both governmental and nongovernmental sources.

Recently, SIP launched a “Business Damage Survey” aimed at capturing “disaster impacts to the business community. The survey is streamlined to ensure data is available from the business community for the local and state appeal for federal assistance.”¹⁸ This online survey, developed

¹⁵ Chen, 2013

¹⁶ <http://www.safeguardiowa.org/partners>

¹⁷ <http://www.safeguardiowa.org/partners>

¹⁸ <http://www.safeguardiowa.org/business-damage-survey>

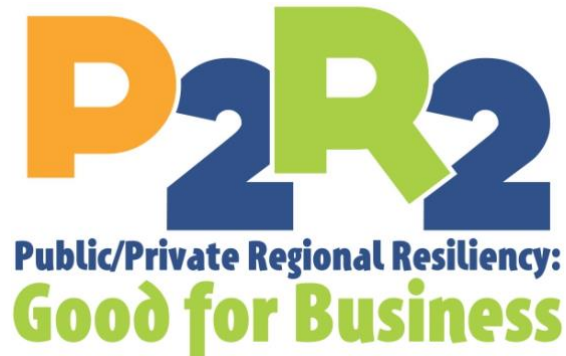
in tandem with efforts from the Iowa Emergency Management Association, aggregate data and share them with local and state officials to aid in recovery-oriented decision making.

Ongoing challenges primarily revolve around funding and capacity. With a full-time staff of two, the organization “depends heavily on membership to volunteer to help create things.”¹⁹ The ability of members to volunteer in addition to their own professional priorities creates a difficult situation. “We just don’t have the capacity or the funding to go beyond our current programs into the next area.”²⁰

¹⁹ Interview; SIP Representative 8.31.17.

²⁰ Ibid.

Infrastructure Systems



According to FEMA, “the Infrastructure Systems RSF works to efficiently facilitate the restoration of infrastructure systems and services to support a viable, sustainable community and improves resilience to and protection from future hazards.”²¹

The Public/Private Regional Resiliency committee (P2R2) is a program under the Northeast Florida Regional Council (NEFRC). NEFRC is a council of governments spanning 27 municipalities across Baker, Clay, Duval, Flagler, Putnam, Nassau, and St. Johns County, FL.²²

Despite representatives stating the partnership focuses on “resilience” rather than “recovery,” P2R2’s projects make it a hybrid Type 1 & 2 partnership, meaning it’s an arrangement intended to aid in physical reconstruction, with an emphasis on policy-oriented information-sharing. P2R2 is driven by a committee of members, largely leaders from the private sector, who volunteer time, facilities, and resources to carry out partnership projects.

The formation of the organization came in phases. The State of Florida requires local governments to have comprehensive plans compatible and integrated with regional plans that are led by councils of government. This mandate brought mixed results, and in Northeast Florida’s case, “cookie-cutter” plans that mirrored one-another for plan integration’s sake, did not foster local official buy-in or the creation of robust implementation strategies. In the mid 2000s, NEFRC decided to break the pattern by creating a leadership academy for a variety of public and private leaders – a crash course in how regional policy works. Graduates of this academy formed a volunteer-based organization dedicated to active visioning and plan-writing.

This group developed a list of action items – including researching the effects of climate change on the region and how it can be addressed. Using data from the U.S. Army Corps of Engineers,

²¹ https://www.fema.gov/media-library-data/1466718036457-e2026c3a5907bf0cb86e75b3a3c51757/RSF_Infrastructure_Systems_0623_508.pdf

²² <http://www.nefrc.org/about.htm>

the group, under the guidance of NEFRC, created a Regional Action Plan. The plan prioritized evaluating the effect of sea-level rise on infrastructure, as well as the identification of projects that could be entirely funded by local and regional agencies.

Eventually, this led to the formation of P2R2, a group of business owners, consultants, and public officials meeting on a volunteer bases to push the Regional Action Plan originally developed by regional leaders across sectors. Committee members include local chamber of commerce representatives, bankers, planners, academics, business associations, emergency managers, and others.

In 2015 and 2016, regular work group meetings led P2R2 to recognize an unmet need regarding “building more resiliently,” especially following disaster events. P2R2 launched projects attempting to devise ways to accomplish this goal. The solution to this challenge was the creation of resources like the P2R2 Infrastructure Checklist.

The Infrastructure Checklist extends regular site inspection and contextualizes infrastructural performance in flood events. Additionally, it assesses vulnerability based on project type and site location, adaptive capacity, and risk based on project type assuming a flood event. Developed through work group meetings with local government officials, technical experts, and researchers from University of North Florida and University of Central Florida, the checklist serves to be a quick, accessible tool for local governments to utilize when considering infrastructural investment, particularly in the wake of disaster events and damaged facilities.

The Infrastructure Checklist focuses on three dimensions of site-specific resilience:

- Vulnerability Based on Project Type and Site Location
- Adaptive Capacity
- Risk Assessment based on Project Type assuming a Flooding Event

NEFRC is sharing a model recommended by the State Department of Economic Opportunity for the consideration of local governments as they update their plan as stipulated in Florida Statutes

163.3178. These statutes, dealing specifically with intergovernmental programs and coastal resource management, outline the necessity of comprehensive plans to “restrict development activities where such activities would damage or destroy coastal resources, and that such plans protect human life and limit public expenditures in areas that are subject to destruction by natural disaster.”

The model, originally from the City of Boynton Beach, Florida, pushes for the consideration of flood mitigation strategies on public land in future use sections of local comprehensive plans. Such considerations involve linking “future risk” with climate change-induced changes. P2R2, through the influence of its committee members, recommends that local governments adapt their comprehensive plans similarly.

Because several of these committee members are leaders of local chambers of commerce, when mobilized, members are better able to make the case to their local governments to plan in ways that help protect their assets. Other projects include conducting resilience workshops for home and business owners to help them understand what they can do during and following a disaster event to recover quickly. Elements of the training include financing recovery, hazard identification, and the creation of decision-making models to guide local governments in making long-term recovery policy decisions in resilient ways.

Cited challenges moving forward include holding municipalities accountable for regionally agreed-upon goals over the long term. Regular review of infrastructure and project actions has no enforcement mechanism and requires the active buy-in from municipal governments.

Additionally, it’s been difficult for the committee to develop quantitative metrics of success. An identified means of evaluating program success is measuring the tax value of property in hazard-prone areas over time in participating municipalities. This type of measure would require longitudinal study, the sort the partnership is currently too young to perform.

Moving forward, partnership representatives have stated the P2R2 aims to increase local implementation capacity. Part of this strategy includes, but is not limited to, potential

consideration for Community Reinvestment Act credit for banks who participate in local resilient recovery lending and rebuilding.

Health & Social Services

FEMA states:

“healthcare is an economic driver in many communities, which if damaged make this sector critical to most communities’ disaster recovery. Social services have a major impact on the ability of a community to recover. The support of social services programs for at-risk and vulnerable children, individuals, and families affected by a disaster can promote a more effective and rapid recovery. The Health and Social Services RSF outlines the Federal framework to support locally led recovery efforts to address public health, health care facilities and coalitions, and essential social service needs. Displaced individuals in need of housing will also need health and social services support.”²³

The Support Alliance for Emergency Readiness (SAFER) is a partnership based in Santa Rosa County, Florida with a mission to “foster efficient, streamlined service delivery to people affected by disasters.” Partnership goals focus on efficiently connecting physical, financial, and informational resources with unmet needs through all phases of disaster. SAFER Santa Rosa is a hybrid Type 1 & 2 partnership, meaning it’s an arrangement intended to aid in physical reconstruction, as well as cross-sectoral information-sharing, with emphasis on the latter.



SAFER developed out of an informal long-term recovery committee led by county emergency management and private stakeholders who took an active interest in Santa Rosa’s economic resilience to disaster events. Over 100 entities are currently represented as partners, participating in capacities ranging from the receipt of the newsletter to volunteer coordination, workshop facilitation, and disaster continuity planning. The organization is led by a 15-person board of directors.

²³ https://www.fema.gov/media-library-data/1466718036433-e2026c3a5907bf0cb86e75b3a3c51757/RSF_HealthandSocialServices_0623_508.pdf

SAFER's structure is split between three focus areas, including communication, leadership, and engagement.

In order to foster enhanced communication, the organization distributes weekly newsletters covering local needs, requests (for donations), information, and opportunities. The latter two subjects are also addressed through inter-sectoral information sharing, workshops, and other training opportunities to increase the area's business resilience.

Organizationally, SAFER was founded in early 2009 to be guided by the leadership of partners from four critical groups: businesses, nonprofit organizations, faith-based organizations, and governmental agencies. The board of directors attempt to arrange for near-equal representation across these groups, including the voices of five businesses, four faith-based organization leaders, four nonprofits, and three local government agencies (public works, county health department, and state legislature representative's office).

This representation parity is written in organizational bylaws, ensuring perspectives across different sectors are included, and no set of interests dominates another's. Beyond board representation, rigid organizational structure hasn't been seen as helpful to SAFER, where partners opt for more case-by-case structures depending on needs and projects that come into the partnership's purview.

The partnership has expanded its engagement efforts from traditional hazard events (fires, floods, etc.) into ongoing issues such as poverty. This expansion serves the partnership in two primary ways: 1) Many of the unmet needs that emerge following a major disaster are the same as those faced by segments of the population on a day-to-day basis and 2) By participating in year-round projects, campaigns, and activities, partners and volunteers are kept engaged and will have an active institutional memory for when major disaster events occur.

Engagement across focus areas is overseen by multiple committees, including committees for: unmet needs, case management, business continuity, recovery, preparedness, logistics, volunteers, administration, and PR/marketing. Each committee determines how often they need to meet to address upcoming challenges.

One of SAFER's unique areas of focus includes addressing unmet needs stemming from non-presidential-declared hazard events, such as the 2009 downtown fire in Milton, Florida. After the blaze destroyed a large portion of the historic downtown, a request went out via newsletter, detailing the needs of a homelessness nonprofit whose offices were destroyed.

Within a week of the event, their immediate needs were met in the form of a new office space, furniture, food, and clothes to continue operations. Additional aid was given to help the organization transition to a more permanent solution.

The organization also facilitated a relationship between county partners and Lowe's following a major flood in 2014. This arrangement was not contractual but enabled partners and local officials to access supplies at a contractor's discount, facilitating their recovery.

An ongoing campaign involving widespread engagement and partner buy-in is SAFER's Annual Day of Service. Through the mobilization of volunteers to explain disaster preparedness, solicit donations, as well as connect with stakeholders who may not yet be partners, SAFER maintains the relationships necessary for effective information dissemination in the event of a disaster.

This program also serves as a major marketing mechanism, generating interest and funding opportunities for SAFER. The partnership organizes similar high-profile events such as planning a consumer disaster preparedness expo alongside a major faith-based police community relations event titled Love My Neighbor. Through the mindful and innovative mixing of entities critical to disaster response and recovery, SAFER increases community resilience pre-event.

Moving forward, SAFER grapples with the challenge of increasing and maintaining partner involvement. According to their guiding focus areas, in order to be effective during the recovery following a major disaster, they must "tread water," and keep up regular outreach with local partners.

Future projects include a Disaster Fund, pitched to a Chamber of Commerce that represents over 2,000 entities, that could finance the hiring of case managers to assist local businesses during

non-declared disasters. Currently, major gaps exist in funding for non-declared events. Localized case management, supplemented with local funding, is perceived to have an added benefit given the knowledge of local context and the swiftness of response, compared to federally-funded assistance that may not be as familiar with local conditions and may be hamstrung by highly bureaucratic programs.

Housing

“The Housing RSF coordinates and facilitates the delivery of Federal resources to implement housing solutions that effectively support the needs of the whole community and contribute to its sustainability and resilience. Housing is a critical and often challenging component of disaster recovery, but must be adequate, affordable, and accessible to make a difference for the whole community.”²⁴

Founded in 2008, the Hancock Resource Center (HRC) is a Hancock County, Mississippi-based organization with a mission to improve housing conditions, opening its doors after Hurricane Katrina destroyed over 70 percent of the county’s housing stock. HRC is best characterized as a Type 1 partnership, or one devoted to physical reconstruction.



Many of HRC’s programs are intended to “foster affordable home ownership, help repair or replace damaged homes, and provide foreclosure and homelessness prevention counseling and assistance,” however, since Katrina, the Center has grown into a full community development corporation.²⁵ The partnership also focuses on long-term recovery challenges such as community financial resilience – offering housing case management services, homeless reintegration programs, and a variety of construction coordination.

The organization’s projects are partially funded through partnerships with the Federal Home Loan Bank, National Banking Association, The Salvation Army, and other organizations. Additional funding assistance is offered through the Department of Housing and Urban

²⁴ https://www.fema.gov/media-library-data/1466718036445-e2026c3a5907bf0cb86e75b3a3c51757/RSF_Housing_0623_508.pdf

²⁵ <http://www.hancockhrc.org/about.html>

Development, Department of Labor, United Way, Hancock Community Development Foundation, the County of Hancock, and the local chamber of commerce.²⁶

Private partners are attracted to HRC through an appeal to their individual missions. Because HRC has a wide range of services it provides, the number of interested potential partners is maximized. One example of this would be the Renaissance Community Loan Fund, an organization oriented towards veteran housing finance. Through working with a grant from the finance agency Enterprise Community Partners, Inc., Renaissance and HRC are able to align and fulfill their missions to provide housing to vulnerable populations.

Successful recovery-oriented projects include “Youth Build Gulf Coast MS Oil Spill Case Management,” (MSOCC) where HRC, after receiving over 400 applicants, provided employment counseling to 51 families, aiding 92 applicants with financial assistance, 65 with credit counseling, and providing all applicants with budget counseling. This program was launched for families unable to recover financially from the British Petroleum Gulf Oil Spill, which impacted many residents still recovering from Hurricane Katrina.

Additionally, the Little Bit Left Fund, a long-term recovery project, aims to assist residents “that are very close to completing their homes, but have a little bit left to be complete. Recipients must meet the long-term recovery criteria of elderly or disabled and be low-moderate income ($\leq 120\%$ AMI) and must have owned the home at the time of Katrina.”²⁷ Twenty-six home projects have been funded since the program’s inception in 2010.

HRC is led by a board, featuring representatives from the county chamber of commerce, public school district, emergency management agency, faith-based organizations, private experts, and other entities. In addition to the board of directors, the Center employs 14 staff members, 13 of whom live locally, overseeing service to “3,060 families in 2016 with a total economic impact of \$6,841,078 in the community.”²⁸ In 2016, HRC’s staffed efforts were paired with over 1,802

²⁶ <http://www.hancockhrc.org/partners.html>

²⁷ <http://www.hancockhrc.org/past-success.html>

²⁸ <http://www.hancockhrc.org/2016-annual-report.html>

hours of volunteer labor, amounting to \$37,195 in total donated labor benefiting residents of Hancock County.²⁹

²⁹ <http://www.hancockhrc.org/2016-annual-report.html>

Natural & Cultural Resources



According to FEMA, “the natural and cultural resources RSF facilitates the integration of capabilities of the Federal Government to support the protection of natural and cultural resources and historic properties through appropriate response and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community

priorities and in compliance with applicable environmental and historical preservation laws and Executive orders.”³⁰

Established in 2003, the New Jersey Corporate Wetlands Restoration Project (NJCWRP) is “a partnership of private corporations, federal and state government, conservation organizations and academia to protect, enhance and restore important aquatic habitats and water quality in New Jersey.”³¹ More specifically, the partnership funds projects including habitat restoration, marshland protection, fish passages, dam removal, species protection, education and outreach, and cultural and historic projects. NJCWRP is best described as a Type 1 partnership. While not directly pertaining to disaster recovery, programs such as those carried out by NJCWRP could be part of larger recovery strategies when agencies consider the use of new open space and increasing flood mitigation. The partnership sees itself as a critical part of the state’s overall resilient recovery efforts following Hurricane Sandy.

The genesis of the partnership lies in the mission of a separate organization, the Coastal American Foundation (CAF). This foundation offers support to state-level chapter organizations to engage in work protecting wetland ecosystems, such as the national corporate wetlands restoration partnership initiative. The first successful chapter of this initiative took root in Massachusetts, before spreading to other parts of the American Northeast, including New Jersey.

³⁰ https://www.fema.gov/media-library-data/1466718036481-e2026c3a5907bf0cb86e75b3a3c51757/RSF_NaturalandCultural_0623_508.pdf

³¹ <http://www.njcwrp.org/about-njcwrp>

The partnership is funded by participating agencies as well as corporate partners. Founding members across sectors recognized there was “a great deal of [federal] money from various sources earmarked for restoration that’s left on the table because there’s no private match.”³² These unused dollars that could be matched with private resources provided partnership founders with “a high degree of leverage” with potential corporate partners.³³

Money is raised through annual dues and allocated to specific projects as they are identified. A private match is used to help with various aspects of the project, but primarily go towards restoration. Occasionally, funds support project components that government sources cannot, such as signage or education. Since its inception, over 26 corporate partners “have contributed time, materials, and money to facilitate selected projects”³⁴ valued at over \$700,000. “These donations have resulted in projects totaling more than \$8,500,000 which have aided in preservation, restoration, enhancement, and protection of more than 520 acres and 25 stream miles and numerous educational programs.”³⁵

Many members’ entry-point is through business associations such as the NJ Business & Industry Association or state chamber of commerce. Corporate members include Exxon Mobil, Pfizer, AECOM, and South Jersey Industries, working alongside NGOs such as NJ Conservation Foundation, The Wetlands Institute, and Green Trust Alliance. Corporate membership, which is recognized after annual dues are paid, equates to \$5,000 for large corporations, \$3,000 for small corporations, and \$500 for NGOs. These fees can be paid directly or provided as in-kind services.³⁶

NJCWRP “appeals to their commitment to corporate stewardship, providing an opportunity, without any direct benefit to the company, to provide a service to the environment in the state.” This appeal to stewardship or corporate giving missions draws the attention of companies wishing to seek recognition for being a positive influence in their community.

³² Interview; NJCWRP Representative 9.12.17.

³³ Ibid.

³⁴ Interview; NJCWRP Representative 9.12.17.

³⁵ <http://www.njcwrp.org/about-njcwrp>

³⁶ <http://www.njcwrp.org/about-njcwrp>

The partnership pitches participation to potential companies by outlining:

- The ability to “multiply” contribution through fund-matching
- Enhancing a working relationship with local and state government agencies
- Stressing the tangibility of projects and leaving lasting impact on communities
- Instilling employee pride
- Strengthening their corporate image

Organizationally, the partnership is managed by a chair, selected from among representatives of member companies. The chairperson has the authority to convene project or issue-specific committees, combining relevant agencies and corporate technical expertise to oversee the execution of a project.

NJCWRP focused on how their missions plays a role in long-term recovery processes following Hurricane Sandy. Project proposals come from a variety of sources, including the EPA, U.S. Army Corps of Engineers, and municipal governments. Projects “must be located on public and protected lands within the state of New Jersey and have a governmental partner (e.g. U.S. EPA, U.S. Corps of Engineers, U.S. Fish and Wildlife Service, NOAA, NRCS, NJDEP, County, Municipality). The government connection can be in the form of direct financial support, technical design or review, in-kind service or other means of involvement.”³⁷ Project proposals are initially received by the partnership’s Projects Sub Committee. “If deemed eligible and approval is recommended, the project will then be submitted to the NJCWRP at the next regular scheduled meeting for a final vote.”³⁸

Projects are largely guided by New Jersey’s Department of Environmental Protection, Board of Public Utilities, Port Authority of New York and New Jersey, and federal agencies. On a monthly basis, government partners, consulting firms, and conservation groups with technical expertise convene to review potential projects as they align with the partnership’s mission and current capacity. “If the group thinks a project is worthy, they make a recommendation for

³⁷ <http://www.njcwrp.org/apply>

³⁸ Ibid.

funding and we have a cutoff of \$25,000, which is the max we commit to a project. We look for as much leverage as possible - an applicant with a commitment to funding from multiple sources,” according to an NJCWRP representative.³⁹

One project example is the Restoration of Squankum Brook – a 3,600-foot section of a waterway that flows into the Manasquan River in Howell Township, NJ. This site was initially chosen by the Township, who partnered with the US Fish and Wildlife Service (USFWS) to bring the project to the attention of NJCWRP. Project completion included “recreat[ing] some of the natural features of Squankum Brook that occurred prior to it being channelized.”⁴⁰ The project included a substantial amount of digging and physical construction, as well as expertise on local flora and fauna. Trout United, a member NGO, joined alongside Howell Township and USFWS in the execution of this project, which was completed with a total budget of \$80,000 - \$25,000 of which came from NJCWRP.⁴¹

Moving forward, primary obstacles include increasing membership and keeping companies engaged. Often one or two key executive staff are the sole reason for a company’s participation – meaning the absence of the key person could result in the dissipation of a long-standing member’s participation. NJCWRP representatives state this problem could be avoided by developing a more standard way by which participation is expected to be institutionalized by member companies, rather than maintained by individual relationships.

³⁹ Interview; NJCWRP Representative 9.12.17.

⁴⁰ <http://www.njcwrp.org/squankum-brook>

⁴¹ Ibid.

Community Planning & Capacity Building

As defined by FEMA, “the Community Planning and Capacity Building (CPCB) RSF strives to restore and strengthen state, territorial, tribal, and local governments’ ability to plan for recovery, engage the community in the recovery planning process and build capacity for local plan implementation and recovery management. Recovery planning in the post-disaster environment builds short- and long-term community resilience, empowers local leaders and stakeholders and improves recovery outcomes for the individual and the community. Governmental and non-governmental partners, coordinated by FEMA, come together under the banner of the CPCB RSF to share information and pool planning support resources. These resources can include planning technical assistance, program support, or funding for planning and capacity building-related initiatives.”⁴²

Initially devised in late 2016 following an October hurricane event, HMDRRI is an organization devoted to “studying the impacts of Hurricane Matthew on Eastern North Carolina, advising Governor Roy Cooper and the North Carolina Division of Emergency Management (NCEM) officials on state and federal recovery policies and programs, and assisting communities develop disaster recovery plans. This partnership is a hybrid Type 1 and 2 organization.



HMDRRI aims to assist in long-term recovery planning for six identified “high-need, low-capacity” communities in Eastern North Carolina. These communities include:

⁴² <https://www.fema.gov/community-planning-and-capacity-building>

- Fair Bluff, NC
- Kinston, NC
- Lumberton, NC
- Princeville, NC
- Seven Springs, NC
- Windsor, NC

HMDRRI addresses needs not met by Stafford Act programs, solicits needs from local governments, and develops strategies to address identified gaps. HMDRRI's immediate goal is to draft several disaster recovery plans with robust implementation strategies for Lumberton, Seven Springs, Fair Bluff, and Princeville. Many of these plans, as well as other projects, are informed by land suitability analyses, downtown flood retrofit consulting, and a partnership with North Carolina State University to produce Home Place, a guidebook addressing open space, housing design, and infrastructure connectivity for the six target communities. Additionally, the organization, in tandem with NCEM, hosted a five day-long community design workshop to craft a vision for the recovery of Princeville, NC.

The concept for the organization was initially proposed by the state's director of Emergency Management, wishing to connect state government and university efforts. Through leveraging the states resources," HMDRRI is able to work alongside state EM and FEMA officials to tackle long-term recovery challenges in the two years following Hurricane Matthew.

HMDRRI is led by the University of North Carolina at Chapel Hill's Dr. Gavin P. Smith, and operates on a budget of over \$900,000, provided by the NC Policy Collaboratory, an organization devoted to connecting policy with research at the University of North Carolina at Chapel Hill, the State of North Carolina, and the Department of Homeland Security's Science and Technology Directorate.

Working with private consultants was cited as important in HMDRRI operation, with many projects overseen by veteran practitioners with their own practices, leaders within the American Planning Association, and employees of AECOM. HMDRRI connects university faculty, students, and practitioners with federal and state agencies.

In the year following the disaster event, HMDRRI has engaged communities to identify issues and unmet, aiming to serve as “policy counsel to state and local governments, including the Governor’s Office, and [coordinate] with FEMA’s Community Planning and Capacity Building group (CPCB).”⁴³ CPCB aided HMDRRI in planning and executing a series of public meetings, workshops, and outreach events to facilitate community input in the recovery planning process.

The impacts of this increased collaborative planning process remain to be seen. Lessons drawn from this partnership could apply to a potential public-private partnership approaching the issue of involving a variety of nongovernmental actors in long-term planning.

⁴³ <http://collaboratory.web.unc.edu/files/2017/05/HMDRRI-Overview.pdf>

FINDINGS

Insights gleaned from each interview and case exploration were comparatively analyzed and the results summarized in seven themes. Each theme is explored, linked to a case example, and used to frame a series of recommendations. Themes are as follows:

Formalization

Many informal sets of meetings between public and private leaders choose to become a 501(c)(3) non-profit organization branded as “partnerships.” Through the creation of a nonprofit, representatives say they are able to orient themselves towards long-term goals due to staying power. Naming, branding, and marketing the nonprofit enables the partnership to better secure funding for long-term projects. Current literature, especially for long-term partnerships, doesn’t highlight this organizational pattern.

Example

Safeguard Iowa Partnership moved from meetings between the governor, state leaders, and the Iowa Business Association to the formation of a legally independent organization.

Recommendation

If public-sector officials have identified potential partners, all interested parties should consider connecting with resources on best practices for non-profit organization creation, funding, and programming.

Multi-scalar

Most disaster-oriented public private partnerships focus on large, corporate-sponsored projects that reach hundreds or thousands of survivors.⁴⁴ While these partnerships are important, there is need for innovation in smaller-scale PPPs that focus on non-declared disaster events that affect neighborhoods or towns. Federally undeclared disasters are cited as taking a bigger fiscal toll on local state and governments than declared ones (Settle, 1985). Existing

⁴⁴ <http://www.houstonchronicle.com/opinion/outlook/article/Strong-public-private-partnerships-key-to-12243527.php>

literature acknowledges the wide range of jurisdictional levels partnerships can operate, including temporal (event-specific vs ongoing) (FEMA, n.d.).

Example

SAFER Santa Rosa focused on organizational resources for a smaller event that impacted local businesses and organizations.

Recommendation

Most partnerships have identified the scale at which they would like to collaborate and operate. Once identified, agents should consider how one partnership could align projects and goals with entities at both higher- and lower-level jurisdictional entities.

Communication

Many partnerships rely on regular outreach and member engagement, especially between disaster events. Usually public officials leading PPPs are the ones maintaining regular channels of communication. This is both a challenge and an opportunity for private firms and agency officials. Keeping up communication is a challenge because it requires engaging material, organizational resources, and time. Existing research highlights the importance of thinking beyond one-way, public-to-private sector communication – but acknowledging there can be a reciprocal communication of needs and capabilities (Chen, 2013).

Example

SAFER Santa Rosa takes on non-disaster related local concerns in order to keep the community engaged and familiar with available channels of communication. This is accomplished through regular programs addressing poverty and episodic community concerns.

Recommendation

Many recovery efforts of private entities go unreported (Swanson, R., Smith, R., 2013). Public-sector agencies at the state- and local-level may want to consider creating a formal

channel of communication highlighting both private-sector needs and capabilities. This could involve the creation of a web-portal, phone line, or staff position.

Recruiting Champions

More than half of the examined partnerships paired funded, staffed resources with unfunded, volunteer resources. To accomplish this, each partnership found creative ways to market involvement – often by tying their mission statement to corporate stewardship or the mission statements of private entities. Volunteering resources took the form of direct funding, dedicating a portion of a staff member’s time to partnership activities, or offering space or facilities.

Example

P2R2 is led by passionate, local leaders in the public and private sector. In return for their time, energy, and passion, the organization was able to contribute to their skillset by training them in local government decision-making processes.

Recommendation

Before approaching a business for recruitment, partnerships may want to consider thinking beyond the donation of money and supplies and appealing to a common corporate stewardship mission that may exist for businesses in the same sector.

What’s in a Name

Some cases are not disaster recovery-oriented in name, or even an explicit mission, but have project goals that fit neatly into a community’s long-term recovery. Through creative use of these mission directives, resilient recovery goals can be reached. Public sector officials can be open to supporting disaster recovery through creatively aligning their goals for disaster recovery with parallel goals of mission-driven organizations.

Example

The New Jersey Corporate Wetlands Restoration Partnership was in operation for almost ten years before a major hurricane event brought it to the table to discuss disaster recovery and hazard mitigation.

Recommendation

It may be difficult to predict what sort of needs emerge following a disaster. In the flurry of activity following an extreme event, public-sector officials may want to consider designating specific staff to “thinking outside the box” and communicating with entities that don’t normally engage in traditional disaster-related projects.

Precipitating Disaster

In multiple cases explored in this report, a large-scale disaster event proved to be the catalyst that led to the creation of the partnership. These entities hastily identified private partners following the disaster by collaboratively identifying local gaps.

Example

Widespread flooding in Iowa provided the political will that led to the formation of the Safeguard Iowa Partnership.

Recommendation

Based on a region’s disaster history, it may be effective to think of potential partnerships and approach partners before they’re actually needed. This way, when an event occurs, public- and private-sector actors can more quickly work together to address joint concerns.

Pitching the Partnership

In order to ensure continuity, all partnerships outline explicit, concrete benefits to private partner involvement, be it to their mission, profit margin, or contact network. It is important for these organizations to be able to show evidence of these benefits if they are to be successful in recruitment.

Example

Hancock Resource Center is able to attract housing and finance-oriented entities through their documented track record of completed housing projects. Providing measurable

outcomes of partnership projects can improve the confidence of both current and potential members.

Recommendation

If possible, all partnerships should keep track of measurable outcomes related to any/all recovery projects or programs. Even if precise long-term impacts are difficult to quantify, measures such as number of people engaged, number of entities involved, and feedback data, tallied over time, could yield significant amounts of information for both operational (program evaluation) and recruitment (or funding) uses.

CONCLUSION

The value of the case studies presented here is the information it yields for nurturing regulatory, professional, and social conditions that produce successful public-private partnerships. Based on report findings, most recommendations for effective long-term disaster recovery public-private partnerships are aimed at public-sector agencies, who have the ability to lay the groundwork for increased communication and collaboration.

Future research contributions include augmenting the existing recovery partnership typology (Chen, 2013). While the distinction between efforts towards physical reconstruction versus information-sharing improvements is important, the prevalence of multiple hybrid entities in this report and other organizations suggests an expansion of identified partnership types is warranted.

Additionally, entities in the identified “zone of uncertainty” should be more deliberately included in more formal planning processes (Smith, 2011). Better methods of inclusion can be conceived after further understanding the diversity of form public-private partnerships can take.

Many proposed solutions to common challenges involve low-cost improvements in communication, including some pre-disaster planning. The themes of the findings of this report all relate to factors of momentum (for partnership creation) or information (for partnership

sustainment). Harnessing political will following a disaster event and formalizing a group of actors are both challenges involving an agency recognizing and utilizing momentum to create an organization that would otherwise not exist. The recruitment of new partners through branding, keeping them informed, identifying and sharing measures of success, scale, and benefits are all challenges involving channels of communication. This information sharing is largely to sustain the funding, operation, and engagement of organizations that already exist.

Most recommendations can be condensed to: 1) identifying the level and type of project needed, 2) creating a formal, branded organization, 3) establishing measures of success, and 4) sharing these measures over time with potential recruits and sources of continued funding. “The capabilities of both the public and private sector need to be built in order to move from singular success stories to cooperative, mutually beneficial efforts at larger scale” (APEC, 2013).

Further inquiry into the crucial role of private entities in disaster recovery could yield benefits across all sectors and levels. The unique challenges faced by organizations taking on long-term problems require the mindful coalition of public and private entities devoted to closing gaps in recovery needs. Identification of these gaps paired with the inclusion of as many actors as possible in formal recovery processes, can lead to long-term solutions.

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APPENDIX

Semi-Structured Interview Instrument

1. What led to the creation of [your organization]?
 - a. PROBE: What events and personalities?
2. How do you sell participation in the partnership to companies?
3. Where do new project ideas come from? How are they implemented?
 - a. PROBE: What structures do new ideas move through before implementation?
 - b. PROBE: What follow-up is there after implementation?
 - c. PROBE: Can you give an example of how [specific program] came about?
4. Has your work intersected with [given regional disaster recovery effort] much?
 - a. PROBE: Which agencies did you do work with?
 - i. PROBE II: Who initiated this connection? /How did it come about?
5. What are challenges for your group's successful operation?
 - a. PROBE: Can you give an example of a program/project not coming to fruition?
 - b. PROBE: Can you give an example of something that hindered your work?
6. What does success look like to you and how do you measure it?
 - a. PROBE: After measurement, who is this information shared with? Why?
7. You mentioned that [feature mentioned on website. E.g.: you're the most successful xyz in the nation] what distinguishes your partnership?
8. Where are you now and how do you see the organization moving forward? What big things lie ahead?
 - a. PROBE: How could the public sector help these goals?
 - b. PROBE: What would make attaining these goals easier?